- 1. (currently amended) Discharge vessel (1) with at least one end part (2) and a
- discharge cavity (3), characterized in, that at least one coating layer (4) is located and
- gas-tight connected between an end part (2) of said discharge vessel (1) and a sealant
- (5) and/or between a sealant (5) and an end closure member (9)

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- wherein the coating is between the sealant and the end of the discharge vessel.
- 2. (original) Discharge vessel (1) according to claim 1, characterized in, that the gastight
- bonding of the coating layer (4) to the discharge vessel (1), to a sealant (5), and/or to an
- end closure member (9) is stronger compared to the direct gas-tight bonding of said
- sealant (5) to said end closure member (9) and/or discharge vessel (1).
  - 3. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) has an expansion coefficient in the range between  $4\cdot10^{-6}$  K<sup>-1</sup> and  $12\cdot10^{-6}$  K<sup>-1</sup>
  - 4. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) is chemically resistant towards oxides and iodides.

- 5. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that
- the coating layer (4) is of a material comprising at least Mo.
- 6. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that
- the coating layer (4) covers at least the end parts (2) of the discharge vessel (1) of the end
- 3 closure device (7).
- 7. (previously presented) Gas-tight high-pressure burner (6) with coating layer (4)
- 2 comprising at least one discharge vessel (1) according to claim 1 and at least one end
- closure device (7) and at least one feed-through (8).
- 8. (Currently amended) Gas-tight high-pressure burner (6) according to claim 7
- comprising at least one end closure member (9) with at least one feed-through (8),
- wherein the end closure member (9) has at least one through going feed-through opening,
- whereby the feed-through opening cross-section varies along the end closure member (9)
- 5 longitudinal axis.
  - 9. (Currently amended) Gas-tight high-pressure burner (6) with coating layer (4)
- 2 comprising

a discharge vessel (1) with at least one end part (2) and a discharge cavity (3),
characterized in, that at least one coating layer (4) is located and gas-tight connected
between an end part (2) of said discharge vessel (1) and a sealant (5) and/or between a
sealant (5) and an end closure member (9) and
at least one end closure device (7) and at least one feed-through (8)Lamp,
comprising at least one gas-tight high-pressure burner (6) according to claim 7, whereby
wherein the lamp is arranged in an automotive headlamp unit.
10. (previously presented) Method of manufacturing a gas-tight high-pressure burner (6)
comprising
a) at least one end closure member (9),
b) at least two feed-through members (8),
c) at least one connection means (10),
d) at least one sealant (5), and
e) at least one discharge vessel (1) with a coating layer (4),
wherein the manufacturing method comprises the steps:

i) filling said discharge vessel (1) with an ionisable filling through at least one

ii) closing said feed-through opening by arranging a feed-through (8) in said

opening followed by gas-tight connecting said feed-through (8) to the end closure

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feed-through opening, and

- device (7) and/or to the discharge vessel (1) with connection means, whereby a
  gas-tight high-pressure burner (6) is obtained.
- 11. (currently amended) A headlight suitable for use in a motor vehicle comprising a
- lamp, the lamp comprising a gas-tight high-pressure burner, the burner comprising
- at least one metal halide discharge vessel comprising
- o at least one end part; and
- a discharge cavity;
- 6 at least one end closure member;
  - at least one sealant between the end closure member and the end part;
- s | at least one gas-tight connection between the a feed through member and the end
- closure member;

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- at least one gas-tight connected coating covering one or more of the end part of the
  - discharge vessel, the sealant, and the end closure device, gas-tight bonding of the
  - coating being stronger than gas-tight bonding of the sealant to the end closure member
- 13 and/or the discharge vessel.

- 12. (previously presented) The headlight of claim 11 wherein the coating layer has an
- expansion coefficient in the range between  $4\cdot10^{-6}$  K<sup>-1</sup> and  $12\cdot10^{-6}$  K <sup>-1</sup> for temperatures in
- 3 the range 298 K to 2174 K.
  - 13. (previously presented) The headlight of claim 11 wherein the coating layer is chemically resistant towards oxides and iodides.
  - 14. (currently amended) <u>The headlight of claim 11</u> wherein the coating layer comprises a material selected from the group comprising at least W, Mo, and/or Pt.
- 15. (previously presented) The headlight of claim 11, wherein the sealant and the
- connection comprise materials that are needed for welding, laser welding, resistance
- welding, soldering, brazing, bonding with adhesive materials, primary shaping, sintering,
- 4 sealing or any combination thereof.
- 16. (previously presented) The headlight of claim 11, further comprising
- at least one opening through the end closure and the end part; and

- at least one feed through member passing through the opening, the feed through being
- suitable for introducing first a filling into the discharge vessel after the end closure is
- sealed to the discharge vessel, and second an electrode after the discharge vessel is filled.
- 17. (previously presented) The headlight of claim 16, wherein the opening has an outer
- cross section and an inner cross section, and the outer cross section is greater than or
- 3 equal to the inner cross section.
- 18. (previously presented) The headlight of claim 11, wherein the end closure is made of
- a functionally graded cermet material including first and second materials denominated A
- and B arranged such that in some portions concentration of compound A
- substantially increases where component B decreases causing gradients of both A and B,
- while an outer layer has a constant concentration of A and B.
  - 19. (previously presented) The headlight of claim 18, wherein compound A comprises Al<sub>2</sub>O<sub>2</sub> and compound B comprises Mo.
  - 20. (cancelled)
- 21. (previously presented) A method of assembling a lamp comprising:

- first sealing at least one cap (9) to a discharge vessel, the cap comprising an opening,
- the sealing process comprising increasing temperature and/or pressure within the
- vessel and using a sealant and a coating;
- 5 after sealing, filling the vessel with at least one desired salt and/or at least one desired
- filling gas, through the opening;
- 7 positioning at least one electrode in opening after the vessel is filled; and
- s second sealing the electrode in the opening using a technique resulting in
- 9 substantially less temperature and pressure increase within the vessel than was
- required by the first sealing, so that the sealing and coating from the first sealing are
- not damaged by temperature and pressure from contents of the vessel.
  - 22. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) is of a material comprising at least Pt.
  - 23. (previously presented) Discharge vessel (1) according to claim 1, characterized in, that the coating layer (4) is of a material comprising at least W.